ABSTRACT OF THE DISCLOSURE

The present invention relates to a method for predicting an optimum transmission frame size in a wireless computer network. The method comprises assessing transmission channel quality in the

5 network, calculating an optimum length for the transmission frame, adjusting the length of the transmission frame to the predicted optimum length, transmitting the frame at its adjusted length and assessing the quality of the transmission of the frame. Prediction of the optimum frame size employs a Kalman filter which employs

10 the parameters of bit error rate and random processing noise in the calculation of the predicted optimum frame length.